

ABSTRACT

A semiconductor device in certain embodiments includes an insulating layer provided above the upper surface of a semiconductor substrate, and a capacitive element section and a resistance element section formed above the insulating layer. In the capacitive element section, a gate electrode serving as an opposite electrode for the capacitive element is formed above the insulating layer. The gate electrode is covered with a dielectric layer comprising silicon oxide, silicon nitride or tantalum oxide, and an electrode for the capacitive element comprising MoSi_x is provided above the dielectric layer. The resistance element section has a resistance element comprising MoSi_x formed simultaneously with the electrode for the capacitive element in the same process.